NORTH DAKOTA UNIVERSITY SYSTEM ODIN LIBRARY SYSTEM

Post-Implementation Report

January 2006

Report Prepared by: Tony Stukel Director, ODIN

TABLE OF CONTENTS

INTRODUCTION	3
A. SYSTEM EFFECTIVENESS	3
B. COST, SCOPE, SCHEDULE, AND QUALITY MANAGEMENT	
C. RISK MANAGEMENT	7
D. COMMUNICATIONS MANAGEMENT	8
E. ACCEPTANCE MANAGEMENT	9
F. ORGANIZATIONAL CHANGE MANAGEMENT	10
G. ISSUES MANAGEMENT	10
H. PROJECT IMPLEMENTATION AND TRANSITION	11
I. PERFORMANCE OF PERFORMING ORGANIZATION	12
J. PERFORMANCE OF PROJECT TEAM	13
K. KEY PROJECT METRICS	14
L. LESSONS LEARNED	15
APPENDIX A	17

INTRODUCTION

The Post-Implementation Report contains an analysis from the Post-Implementation Survey sent to various project team members. This survey was sent to the individuals who were most heavily involved in or performed a major role in the project. Individuals included members of the Steering Committee, ODIN central site project team and the Vendor.

Survey questions were rated on a scale of 1 to 3 with 1 being low and 3 high. Results were calculated based on all responses that were not listed as N/A. The rating was derived from the responses (1, 2, or 3) to each question answered divided by the total number of respondents. Each section was then scored based on all the questions answered in the section with a 1, 2, or 3 divided by the total number of respondents. The rating gives an indication of satisfaction and defines areas where improvements are needed. Included are some of the comments that were expressed in the survey and in some cases a general statement was made to cover a group of comments made with the same theme but stated in different ways. Not all comments are included as this report.

Attached as an appendix (Appendix A) is a sample copy of the survey that was distributed to key project team members. This survey is being used on all projects to determine the effectiveness of project management.

A. SYSTEM EFFECTIVENESS

The new ODIN Library Management System successfully meets many of the NDUS Libraries and the needs of the public, school and other types of libraries who use ODIN to provide library patron services and library management services.

The survey responses indicated that the implementation was difficult but that the new library system is working for the libraries. Statements from users like "Aleph isn't quite up to the level of the previous PALS system yet, but is getting close" is an indication that

the system is new and the libraries are not yet the 'experts' they used to be with the system they had used for more than fifteen years.

There is a need for greater user training to take place continuously for some time to come. This is driven by the newness of the system to the library staff and the expectation that the next several annual version updates will bring greater functionality. This is a good thing for libraries and library patrons but will require significant learning effort on the part of library staff to effectively use the capabilities available in the system.

There was a significant learning curve for the ODIN central site staff and for the staff of all the ODIN libraries. In the late 1980s and early 1990s ODIN added libraries by implementing them one or two libraries at a time. This was possible because the libraries were transitioning from a manual system to a computer based system. During this transition all libraries had to change from the previous software, PALS, to Aleph within six months once the process began.

There is still a lot to be learned about running and using the new system to achieve the level of comfort and effectiveness that we had built with the previous system.

Overall Survey Rating:

2.04

- Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

B. COST, SCOPE, SCHEDULE, AND QUALITY MANAGEMENT

Project management processes were used to track costs, scope, schedule, and quality. A Risks and Issues Log was maintained to track these items.

Project Cost

During the early stages of the project the system replacement cost was based upon an estimate from the RFI that ODIN had done when surveying the market. The initial estimate was two million dollars. After the RFP process and completion of a contract with the software vendor the project cost was placed at \$1,492,400 based on three software components, Aleph 500, SFX and MetaLib, and the hardware required to implement those components. At the beginning of the implementation of the main Aleph 500 software, which is the core library system software, it was determined that the emphasis would be on implementing that software because the libraries were able to fund that part of the proposed project. The remaining software would be implemented dependent upon funding. Over the course of the project life funding was not found for SFX and MetaLib.

Actual project cost at the end of the project was \$1,140,342. This is \$352,058 less than the projected cost of \$1,492,400. The software and hardware cost associated with MetaLib and SFX was \$258,680.

Project Scope

The one significant change in the project occurred at the beginning of the project by default. Funding was not available for the SFX and MetaLib parts of the project. Efforts to secure funding during the project were not successful.

Recognizing that implementation of the ILL module would benefit in terms of schedule and quality if staff from a library were involved, ODIN secured the services of one library staff for the process. That staff member attended a week of special training with one ODIN staff. They also spent a week at the ODIN offices with special Ex Libris staff just prior to go-live. This action proved to be extremely positive for the project.

Major responsibility for working with selected user libraries was taken by a library project team member for the Course Reserves module. After ODIN did essential module setup for the 16 libraries who planned to use the module. The project team member coordinated training efforts as the libraries began using the module.

Project Schedule

The project schedule showing actual start and finish times for milestone segments is shown below.

Task	Actual Start	Actual Finish
ODIN LIBRARY SYSTEM PROJECT	03/03/2002	08/08/2005
Kickoff to go-live		
Project Kickoff	03/03/2003	03/07/2003
Software Installation	03/26/2003	04/14/2003
(Initial installs of Aleph)		
Test Data Extraction	04/24/2003	06/17/2003
Data Conversion Analysis / Test	05/01/2003	09/13/2004
Conversion		
Library Training - Statewide regional	03/15/2004	04/06/2004
Go-Live: Aleph 500	10/08/2004	03/24/2005
Go-live: ILL	08/08/2005	08/08/2005

There were two significant dates that had to be altered during the project. One was the initial go-live date and the other was the go-live date for the Inter Library Loan (ILL) module which had to be implemented separate from the Aleph 500 software.

The project had to change the original go-live date within a month of the July 1, 2004 go-live start because serious discrepancies were found in the data conversion documents used by ODIN staff and the vendor. Because accurate data conversion is critical to the project it was determined that a three month delay of the go-live data had to be made. We did begin the go-live process for the Aleph 500 software starting in October per the revised plan. The ILL module was not delivered until mid June 2005. We were forced to delay go-live of that module from July 1, 2005 until August 8, 2005.

Project Quality

The quality of the project was heavily dependent, in the long run, on the data conversion quality. A great deal of effort was put into this process by ODIN, ODIN libraries staff and by the vendor.

Overall Survey Rating:

2.03

Scale of 1 – 3, with 1 being low and 3 high

 Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

C. RISK MANAGEMENT

Key project risks were identified as being staffing levels at ODIN. The small ODIN staff did not have full overlap in skills required regarding the outgoing system or the incoming system. To moderate those risks and to expand direct involvement of the stakeholders ODIN put together a project team made up of functional specialists from ODIN libraries. These people provided direct input into configuration and ODIN was able to draw on them for special work during the project if needed.

Comments about this were few. One respondent said "I don't think most library directors (& their staff) had any idea what was going to be involved in the project, or how to reduce the potential for errors and problems beforehand." One expressed that they felt "...this project was going to be much easier than it proved to be."

One of the significant difficulties was that ODIN was working with large numbers of libraries each of which was autonomous. This together with low levels of staffing in many of those libraries made keeping the project moving forward challenging.

Overall Survey Rating:

- Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

D. COMMUNICATIONS MANAGEMENT

A "kick-off" and planning meeting was held at the beginning of the project. ODIN staff, library project team members and several library directors as well as the vendor were present at the kick-off.

A project listserv was set up with the vendor. This listserv was used by ODIN and Ex Libris staff for all communication regarding project matters. A listserv encompassing all ODIN library staff members was set up for communication of all type of project issues and reports so that communication of all types would be available to all staff.

A steering committee made up of one or more directors of each type of library – academic, public, school, special – was set up to discuss project issues. These members were to be the conduit and representative to their respective library types.

Comments about effectiveness of information available tended to focus on wanting more detailed how-to information and less on the higher level aspects of the project. It was felt that communications with the stakeholders was inadequate because all members of the ODIN team and particularly the project manager were "too busy with the nuts and bolts of implementation."

Some comments expressed disappointment that there were few face to face meetings and that it hampered progress. In reality, dealing with more than 50 libraries in the physical space of the entire state it was not possible to expend the very limited time available in extensive travel.

Overall Survey Rating:

- Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

E. ACCEPTANCE MANAGEMENT

The process for testing data, particularly in the go-live phase, was very important. By definition all ODIN libraries had a part in this process since they had to review their own data.

The response to the question "How effective was the acceptance management process?" was that most felt there was too short a time frame for final testing. It should be noted that during the final testing of the conversion the library was down until the conversion was accepted. No problems were expected at this point due to previous testing and review.

To the question how well prepared were you to accept project deliverables? The answer was, "Staff need to know exactly what to look for in records etc. when checking the results of loads, updates and service packs." Another related answer was "We needed more training."

Responses about effectiveness of the decision making process for moving forward with the project elicited responses of: "Marginal" and "Too much done with verbal agreement on the fly." This actually confused the final conversion, the final check of data and "go-live" with the grueling work that was done on conversion and table setup over the many preceding months (often over and over again) so that the final would be a certain "go".

Overall Survey Rating:

- Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

F. ORGANIZATIONAL CHANGE MANAGEMENT

The acceptance of change by the libraries as entities and by the individual library staff members involved varied greatly as might be expected. This change of system was known to be in the future of ODIN since at least 1994. The main question was when it would happen. In 1997 the ODIN libraries all participated in creating a Request for Information (RFI). But some libraries felt that they had little time and information to plan effectively.

Asked about training and information available to enable adjustment to change drew the only response about the public end user. It suggested that "Patrons were given several months to switch to the new system. Advance training was great." But the libraries felt more like things were done on the fly.

Overall Survey Rating:

1.55

- \circ Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

G. ISSUES MANAGEMENT

Issues were tracked using an Issues/Changes Log. In the course of the project forty four issues were logged. Many of the issues had to do with specific conversion issues that were in many cases generic and in some cases specific to one or a group of libraries.

Perception of the handling of issues varied. The question about effective management of issues got answers like, "Some issues were resolved quickly; on others ODIN and Aleph were very slow" and "Issues were not resolved until it was a real problem".

Libraries focused on specific issues that impacted them. They mostly noted when they had issues that were slow to be resolved. They were not certain of why their issues were a problem or if the problem needed to be resolved by ODIN or Ex Libris.

In general the low level of staffing at ODIN and anxiety of the library staff brought about a stronger feeling of concern than there should have been.

Overall Survey Rating:

1.52

- Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

H. PROJECT IMPLEMENTATION AND TRANSITION

The implementation of the system was made more difficult than it might have been because of the three month delay from July to October in beginning the go-live process. This change disturbed the planned training cycle. In spite of this disruption the team members and the libraries worked very hard to overcome this situation during the transition to production.

There were complaints about the timeliness and targeting of the documentation for the system. It was suggested that many things that the libraries learned from testing were not found in the manuals.

The timing and the amount of training were found lacking. Training was described as "good" but not enough. Training was also described as "essentially demonstrations, not training". Some libraries felt that they "had to figure things out for themselves."

Overall Survey Rating:

1.35

- Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

I. PERFORMANCE OF PERFORMING ORGANIZATION

The responses to this section of questions were fewer and suggested that libraries felt project resources not adequate.

Asked about the transition of support from Project Team to institution the answer was, "ODIN libraries took on management of local system when requested by ODIN." In fact the transition was from conversion status to production status. The Project Team supported both. When a library went to production the specific library no longer had to pay attention to the conversion that was still going on for other libraries.

Asked about the planning and preparation for ongoing responsibilities the libraries indicated that they were "not sure the Project Team envisioned the number and extent of ongoing issues related to new system and therefore did not adequately prepare local libraries for workload." Another commented that "The project became far more complex than expected, and continues to be".

Overall Survey Rating:

- Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded divided by total number of respondents for this section of the survey.

J. PERFORMANCE OF PROJECT TEAM

The successful completion of this project required unusual effort and dedication on the part of all participants. The Project Team, the vendor and the libraries were seriously tested and succeeded in the face of considerable difficulty.

The view of the effectiveness of the Project Manager varied. In one case it was said that "Given the lack of support from ExLibris and inadequate staffing, [the Project Manager] did a remarkable job keeping the project on track." In another case the comment was "The performance was not adequate due to disorganization and lack of communication."

Did the Project Team understand their expectations? Some suggested that they did not realize "...that we were depending on them to pass their learning on to the group afterwards. Their role in actively leading the user groups also seems not to have been followed up on." Other responses flatly suggested that "Team members understood."

The truth about understanding roles as team members was probably somewhere between as suggested by the response to the question about effectiveness of each team member in fulfilling their role. Answers were from "Some of the "specialists" or "module user group leaders were more effective than others" to "Not effective."

Asked how effective team member training was one answer suggested that there was a perception that team members to more and better training than others. One answered that "The "specialists" recruited for the team (user groups) benefited by the more in-depth training they received. Unfortunately, that wasn't passed on to the broader group." In reality, they got overviews pertaining more to giving them knowledge needed to make configuration decisions and conversion decisions."

Overall Survey Rating:

- Scale of 1 3, with 1 being low and 3 high
- Results are based on all responses that were not listed as N/A. Rating derived from points awarded

divided by total number of respondents for this section of the survey.

K. KEY PROJECT METRICS

Cost

An estimate of \$2,000,000 was originally set as the expectation based on an RFI in 1997. The RFP and contract process set the budget for the project at \$1,492,400 after the contract was signed and discussions with the vendor solidified our needs over and above Ex Libris software.

Funding of the project was from local funds set aside by the libraries. They were concerned that ODIN's software vendor was going out of business and they would be forced to move to a new vendor. The libraries were also concerned that budget issues in the state would make new funding for the project unlikely.

Schedule

The schedule, once established post contract with the vendor, had two major adjustments. The first change, caused by concern over conversion accuracy, was a delay of three months in starting the golive process of the first libraries. It moved from July 1, 2004 to October 8, 2004. The second delay was caused by a significant delay in the delivery of the Inter Library Loan software. This moved from July 1, 2005 to August 8, 2005.

Scope

The original scope of the project included the Aleph 500 software and two other supplementary modules, SFX and MetaLib. Only Aleph 500 was funded (by the libraries). This was noted in the quarterly reports.

Quality

The project has met the expectations of libraries. Their continued operation is assured even as their old vendor is closing its doors as expected. The flexibility of the new system is what gives the new system power to deliver services now and promise to do even more in

the future. In part this depends on our ability to take advantage of that capability.

As they have gained familiarity with the new system and forget the old one acceptance of the new system is growing. The new system has a considerable ability to deliver improved services to the library community.

L. LESSONS LEARNED

Three questions were asked of the team members which reflects on lessons learned. These questions are listed below and comments are included with each.

What were the most significant issues on this project?

- "Communication"
- "Training"
- "Documentation"
- "Communication from the ODIN office and lack of adequate staff at the ODIN office"
- "It seemed that the ODIN staff was not communicating with each other we would get conflicting answers from ODIN staff."
- "Also, ODIN and Ex Libris did not communicate well."
- "Documentation needed to be available and more complete."
- "The project took a lot longer than planned to get Aleph up and running, including ILL and creating a stable, user-friendly OPAC."
- "Issues of timing, and impact on service operations and staff"
- "Training, vendor understanding of what was needed in deliverables, and staffing to accomplish the project"

What were the lessons learned on this project (from things that didn't go well)?

- "Develop a plan for improving communication, training and documentation & Bib Instruction materials."
- "Write future contracts so the vendor is more accountable for training and support."
- "Clarify the role of the users groups and breathe some life into them."
 "New system is more complicated than expected resulting in need for local technical expertise at each library. ODIN does not have adequate staff to implement and manage new system. More ongoing training was needed."

What on this project worked well and was effective in the delivery of the system?

"Strong commitment on the part of ODIN director, staff and member libraries to make this successful"

"We appreciate the ODIN staff accepting our assistance in creating the tables for the libraries that we work with."

"We appreciated the friendly attitude that the ODIN staff had throughout the project. It was a big project and a lot of work for the ODIN staff, and we thank Tony, Ellen, and Ginny"

"The Project management's unwavering commitment to convert the records with minimal outstanding problems. Hard line negotiations to insure deliverables were the best they could be, even if schedules were not met."

[&]quot;Steering committee bi-weekly conference calls"

[&]quot;IVN video conferencing for mini-training sessions"

[&]quot;The cataloging and circulation GUI's are effective."

[&]quot;There were no major flaws in the Cataloging module."

APPENDIX A

Purpose

The purpose of the Post-Implementation Survey is to collect feedback from project team members (the Steering Committee, Core Team, and Technical Team) about the success of the implementation. Survey responses will be summarized into a Post-Implementation Report, which will be available at a later date.

Instructions

- 1. Answer each question by entering a rating and comments. Please be honest and sincere. Your feedback will create valuable information for future NDUS /ODIN projects.
- 2. If you do not understand the question or it is not applicable to your role, enter N/A for a rating and N/A under comments.
- 3. There is a "General Questions" section on page 8 that is appropriate for general issues and lessons learned. This area should help you share information not covered in a specific question.
- 4. Contact Tony Stukel with any questions at 777-4777 or tony.stukel@ndus.nodak.edu
- 5. Return the survey by **December 05, 2005** via email to Tony Stukel at tony.stukel@ndus.nodak.edu
- 6. THANK YOU for your participation!!

Date:
Name:
Institution:
Department:
Role on Project:

	Questions	Rating (1 – 3) 1 is low and 3 is high	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
1.	How well does the system meet the stated needs of the NDUS?	STEM EFF	ECTIVENESS
2.	How well does the system meet your needs?		

	Questions	Rating (1 – 3) 1 is low and 3 is high	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
3.	When initially implemented, how well did the system meet the stated needs of the NDUS?		
	To what extent were the objectives and goals outlined in the Business Case and Project Charter met?		
5.	What is your overall assessment of the outcome of this project?		
6.	How well did the scope of the project match what was defined in the Project Proposal?		
7.	How satisfied are you with your involvement in the development and/or review of the Project Scope during Project Initiation and Planning?		
	COST, SCOPE, SC	HEDULE,	AND QUALITY MANAGEMENT
8.	Was the Change Control process properly invoked to manage changes to Cost, Scope, Schedule, or Quality?		
9.	Were changes to Cost, Scope, Schedule, or Quality, effectively managed?		
10.	Was the established change budget adequate?		
11.	As project performance validated or challenged estimates, was the change control process used when appropriate and were challenges effectively managed?		

Questions	Rating (1 – 3) 1 is low and 3 is high	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
12. How effectively was the Quality Management Plan applied during Project Execution?	J	
13. How effective was the quality assurance process?		
14. How effective were project audits?		
15. How effective was the utilization of Best Practices from prior projects in the NDUS and Institutions?		
	RISK MAN	AGEMENT
16. How well were team members involved in the risk identification and mitigation planning process?		
17. To what extent was the evolution of risks communicated?		
18. How effectively was the Risk Management Log updated or reviewed?		
19. How comprehensive was the Risk Management Log? (i.e. did many events occur that were never identified?)		
СОММ	UNICATIOI	NS MANAGEMENT
20. How effective were the informational materials available to orient team members?		
21. How satisfied were you with the kick-off meetings you participated in?		

Questions	Rating (1 – 3) 1 is low and 3 is high	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
22. How effectively were the project team meetings conducted?		
23. How effectively and timely were Progress Reports provided by Team Members to the Project Manager?		
24. How effectively were stakeholders involved in the project?		
25. Was communication with stakeholders (president, vice presidents, other directors, end users) adequate?		
26. How well were your expectations met regarding the frequency and content of information conveyed to you by the Project Manager?		
27. How well was project status communicated throughout your involvement in the project?		
28. How well were project issues communicated throughout your involvement in the project?		
29. How well did the Project Manager respond to your questions or comments related to the project?		
30. How useful was the format and content of the Project Status Report to you?		
31. How useful and complete was the project repository?		

Questions	Rating (1 – 3) 1 is low and 3 is high	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
ACC	EPTANCE	MANAGEMENT
32. How effective was the acceptance management process?		
33. How well prepared were you to accept project deliverables?		
34. How well defined was the acceptance criteria for project deliverables?		
35. Was sufficient time allocated to review project deliverables?		
36. How closely did deliverables match what was defined within Project Scope?		
37. How complete/effective were the materials you were provided in order to make a decision to proceed from one project lifecycle phase to the next?		
ORGANIZA	TIONAL CH	HANGE MANAGEMENT
38. How effectively and timely was the organizational change impact identified and planned for?		
39. How pro-active was the Organizational Change Management Plan?		
40. Was sufficient advance training conducted/information provided to enable those affected by the changes to adjust to and accommodate them?		

Questions	Rating (1 – 3)	Comments (What worked well? What could have been
	1 is low and 3 is high	done better? What recommendations do you have for future projects?)
41. Overall, how effective were the efforts to prepare you and your organization for the impact of the new system?		
42. How effective were the techniques used to prepare you and your organization for the impact of the changes brought about by the new system?		
Į:	SSUES MA	NAGEMENT
43. How effectively were issues managed on the project?		
44. How effectively were issues resolved before escalation was necessary?		
45. If issue escalation was required, how effectively were issues resolved?		
46. How effectively were issues able to be resolved without impacting the Project Schedule or Budget?		
PROJECT II	MPLEMEN'	TATION & TRANSITION
47. How effective was the documentation that you received with the system?		
48. How effective was the training you received in preparation for the use of the system?		
49. How useful was the content of the training you received in preparation for the use of the system?		

Questions	Rating	Comments
	(1-3)	(What worked well? What could have been
	1 is low and 3 is	done better? What recommendations do you have for future projects?)
	high	mare for fatare projectory
50. How timely was the training		
you received in preparation		
for the use of the system?		
51. How effective was the support		
you received during		
implementation of the		
system? PERFORMANCE	 OF THE PE	ERFORMING ORGANIZATION
	_	E INSTITUTIONS)
52. How effectively and		
consistently was sponsorship		
for the project conveyed?		
53. How smooth was the		
transition of support from the		
Project Team to the NDUS and Institutions?		
54. Did the Project Team		
adequately plan for and		
prepare the Institutions for		
their ongoing responsibilities		
for the product or service of		
the project?	IANCE OF	THE PROJECT TEAM
_		
55. Overall, how effective was the		
performance of the Project		
Manager?		
56. How well did the Project		
Team understand the		
expectations of their specific roles and responsibilities?		
57. How well were your		
expectations met regarding		
the extent of your involvement		
in the project (effort time		
commitments etc.)? 58. How effective was each		
Project Team member in		
fulfilling his/her role?		

Questions	Rating (1 – 3) 1 is low and 3 is high	Comments (What worked well? What could have been done better? What recommendations do you have for future projects?)
59. How effective was team member training?		
	GENERAL (QUESTIONS
60. What were the most significant issues on this project?		
61. What were the lessons learned on this project (from things that didn't go well)?		
62. What on the project worked well and was effective in the delivery of the system?		